U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT Assistant Secretary for Housing-Federal Housing Commissioner

TO: DIRECTORS, HOUSING DIVISION
DIRECTORS, MULTIFAMILY DIVISION
DIRECTORS, SINGLE FAMILY DIVISION

Series and Series Number:

(Supersedes issue dated December 1, 1994) MATERIALS RELEASE NO. 1216b

ISSUE DATE: March 4, 1998

REVIEW DATE: March 4, 2001

SUBJECT: 1. Product

RUBEROID - Modified Bitumen Roofing

2. Name and Address of Manufacturer

GAF Building Materials Corporation 1361 Alps Road Wayne, NJ 07470-3689

Data on the nonstandard product, described herein have been reviewed by the Department of Housing and Urban Development (HUD) and determination has been made that it is considered satisfile from a technical standpoint for the use indicated herein. This Release does not purport to establish a comparative quality or value rating for this product as compared to standard products normally used in the same manner.

This Materials Release cannot be used at an indication of endorsement, or approval by HUD of the described product, and any statement or representation, however made, indicating such approval or endorsement by HUD is unsufficiend. See Code 13, U.S.C. 709.

Any reproduction of this Release must be in its entirety.

<u>USE</u>: RUBEROID roof systems are installed as single and multi-ply roofing construction that can be used on nominally flat to 3 in/ft roof slopes. The roofing system can be used in all areas of the contiguous U.S., and can be laid over any type deck and/or insulation which is acceptable to the GAF Materials Corporation.

NOTE: Nominally flat means the roof shall have a minimum slope of 1/4 inch per foot.

DESCRIPTION:

The GAF RUBEROID Modified Bitumen (MB) roofing membrane has a polyester mat core with modified bitumen applied on each side of the core. RUBERIOD MB is manufactured in three different membranes:

- 1. Smooth Surfaced Torch Applied
- 2. Granule Surfaced Torch Applied
- 3. Granule Surfaced Mop Applied

RUBEROID MB can be used in the construction of flashing in addition to membrane.

MATERIALS:

All materials for these roof systems shall be supplied by GAF Materials Corporation, or its approved roofing contractor. Any materials supplied by a contractor e.g. ballast and nailers, must meet GAF's requirements as set forth in their current specifications. Physical properties of the membrane (tensile strength, elongation, cold flex, dimensional stability and lap joint strength) are on file at HUD Headquarters and GAF Materials Corporation.

WIND AND FIRE CLASSIFICATION:

Mechanically fastened roofing systems shall be designed to resist wind uplift forces as determined in the Wind Design Guide for Mechanically Fastened Single-Ply Roofing Systems, published by the Single Ply Roofing Institute (SPRI).

Ballasted roofing systems shall be designed in accordance with the Wind Design Guide for Ballasted Singly-Ply Roofing Systems, published by SPRI.

Fire Classification shall be in accordance with Underwriters Laboratories, Inc. (UL) or Factory Mutual Engineering Corporation (FM) construction details. To qualify for fire rating and uplift resistance, the system shall be in the current UL or FM Listings.

INSTALLATION:

1. General

The RUBEROID roofing system shall only be installed by roofing contractors approved by GAF Materials Corporation. The System shall be installed in accordance with GAF Materials Corporation's specifications and details in effect at the time of installation, and HUD Minimum Property Standards.

2. Substrate Preparation

Preparation of the substrate shall comply with the latest edition of the GAF Materials Corporation RUBEROID Modified Bitumen Roofing Application and Specifications Manual. Design of the roof deck is the responsibility of the owner or his architect/engineer.

3. Insulation

Use only the insulation type indicated in the RUBEROID specifications, or as approved in writing by GAF Mateials Corporation. All insulation board shall be attached using the method as tested for wind uplift.

4. Membrane

All RUBEROID roofing systems, including insulation, shall be installed by a GAF Materials Corporation approved contractor. Membrane installation, including placing, bonding, lap splicing, perimeter attachment, flashing, construction closure, walkway and other required work to provide a watertight roofing system, shall comply with GAF Materials Corporation specifications.

INSPECTION:

A designated representative of GAF Materials Corporation shall make inspections of the installation at the following intervals: (1) prior to delivery of materials--to accept or reject the surface of the roof deck to which the roofing system is to be applied; (2) during the installation--to inspect and approve the installation techniques and methods; and (3) upon completion--to give final approval to the installation.

WARRANTY:

A ten year GAF Materials Corporation Liberty Guarantee shall be provided for all installations. The warranty shall automatically transfer to successors upon written notice to GAF Materials Corporation of such a transfer.

GAF Materials Corporation hereby warrants to the owner of its roofing system, installed by an applicator approved by GAF Materials Corporation, that the system will remain in a watertight condition and will retain at least 80% of its specified aged thermal resistance value, if applicable, for a period of ten years from the date of installation. In the event of failure of the aforesaid system to function as warranted above, whether on account of defective materials, faulty installation or on account of normal processes of wear and aging, GAF Materials Corporation will make, or cause to be made, repairs necessary to enable the system to perform as warranted above.

GAF Materials Corporation's obligations to repair the system under this warranty shall not be in force or effect unless: (1) GAF Materials Corporation is notified of any failure of the system covered by the warranty within thirty (30) days following such failure; (2) the system is installed by an applicator approved by GAF Materials Corporation and (3) no alterations or repairs to the system are made without the prior written approval of GAF Materials Corporation as to the extent, methods and materials used.

GAF Materials Corporation assumes no liability for any failure of the system resulting from wind forces which exceed the design wind, nor for acts of God, including without limitations, lightning or earthquake; nor for any failure of the system resulting from fire of any origin or cause, nor for any failure of the product caused by movement of the substrate or by structural defects of the building on which the system is applied; nor from deliberate misuse of the product; nor for any failure of the system caused by leakage or any other cause from an adjacent structure.

MANUFACTURER'S RESPONSIBILITIES:

Issuance of this Materials Release (MR) commits the manufacturer to fulfill, as a minimum, the following:

- 1. Produce, label and certify the material, product or system in strict accordance with the terms of this MR.
- 2. Provide necessary corrective action in a timely manner for all cases of justified complaint, poor performance or failure reported by HUD.
- 3. When requested, provide the Office of Consumer and Regulatory Affairs, Manufactured Housing and Standards Division, HUD Headquarters, with a representative list of properties in which the material, product, or system has been used, including complete addresses or descriptions of locations and dates of installation.
- 4. Inform HUD, in advance, of changes in production facilities, methods, design of the product, company name, ownership or mailing address.

EVALUATION:

This MR shall be valid for a period of three years from the date of initial issuance or most recent renewal or revision, whichever is later. The holder of this MR shall apply for

renewal or revision 90 days prior to the Review Date printed on this MR. Submittals for renewal or revision shall be sent to HUD Headquarters. Appropriate User Fee shall be sent to:

U.S. Department of Housing and Urban Development Technical Suitability of Products Fees P.O. Box 954199 St. Louis, MO 63195-4199

The holder of this MR may apply for revision at any time prior to the Review Date. Minor revisions may be in the form of a supplement to the MR.

If the Department determines that a proposed renewal or supplement constitutes a revision, the appropriate User Fee for a revision will need to be submitted in accordance with Code of Federal Regulations 24 CFR 200.934, "User Fee System for the Technical Suitability of Products Program," and current User Fee Schedule.

CANCELLATION:

Failure to apply for a renewal or revision shall constitute a basis for cancellation of this MR. HUD will notify the manufacturer that the MR may be canceled when:

- conditions under which the document was issued have changed so as to affect production of, or to compromise the integrity of the accepted material, product, or system,
- the manufacturer has changed its organizational form without notifying HUD, or
- 3. the manufacturer has not complied with responsibilities it assumed as a condition of HUD's acceptance.

However, before cancellation, HUD will give the manufacturer reasonable notice, in writing, of the specific reasons for cancellation, and the opportunity to present views on why the MR should not be canceled. No refund of fees will be made on a canceled document.